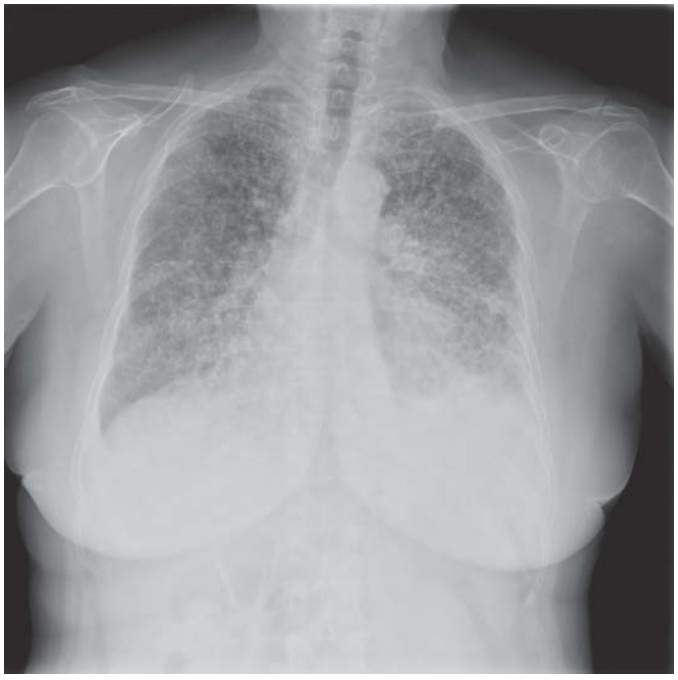

Figure 1. Micronodular X-ray pattern as a manifestation of a lung adenocarcinoma.

and for which a 6-month follow-up was recommended; gynaecological examination ruled out gynaecological pathology; negative precipitins against hen serum, flexible bronchoscopy that only revealed rough-looking mucous of the left main bronchus without signs of infiltration or endobronchial masses. PET: hypermetabolic lesions in both lung parenchyma, mediastinal nodes, infradiaphragmatic nodes, pleura, bone and more uncertainly laterocervical ganglia, highly suspicious of malignancy without completely ruling out infectious aetiology (tuberculosis).

Although the results of the tests performed were inconclusive they indicated tumour pathology. The Thoracic Surgery Department was therefore contacted, performing a left thoracoscopy, which extracted 700 cc of yellowish liquid and visualising neoplastic-looking implants in the parietal and diaphragmatic pleura. There were multiple lung nodules, great parenchymal involvement and patchy nodular affectation of the parietal pleura. The pathology result reports infiltration by adenocarcinoma of probable pulmonary origin.

Although the X-ray presentation of a lung tumour as a micronodular pattern has been reported,[1] it is very rare and often difficult to interpret. There are reported cases of lung tumours showing ground-glass opacity,[3] which can be seen in bronchioloalveolar carcinoma and adenocarcinoma, but this is also very rare.[3] In this case, pathology reports an adenocarcinoma of probable pulmonary origin. Given that no autopsy was performed, it is not possible to state for certain, however, the complementary tests performed found no evidence of primary tumours in other organs. This concurs with the results of the study carried out by Al-Brahim[4] which found that adenocarcinoma is the tumour that is most frequently presented with multiple metastases and that the locations of the primary tumour are most frequently the lung and the large intestine, respectively.

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Bronchial Thermoplasty in Asthma: An Updated Review

Actualización de la revisión de termoplastia bronquial en el asma

To the Editor:

The review "Bronchial Thermoplasty in the Treatment of Asthma" published in the *Archivos de Bronconeumología* in February 2010 explained the multi-centre, double-blind clinical trial that was completed, which compared patients receiving asthma treatment by bronchial thermoplasty with those in a sham bronchoscopy group.

In the American Journal of Respiratory and Critical Care Medicine of January 2010 the results of the above clinical trial are published,[2] which is an important complement to this review and also motivate this letter.

This new study analysed 288 patients who had persistent, moderate-severe and not well-controlled asthma despite treatment with a dose of inhaled glucocorticoids greater than 1,000 μg/day of inhaled beclomethasone and beta-2-adrenergic agonist at a dose equivalent of salmeterol equal to or greater than 100 μg/day. The patients may also have been taking leukotriene antagonists, omalizumab and oral glucocorticoids at doses equal to or less than 10 μg/day of prednisone or its equivalent.

The subjects were randomly divided into 2 groups: the first (n = 190) received treatment with 3 bronchial thermoplasty sessions and the second (n = 98) received treatment with 3 sessions of placebo bronchial thermoplasty using a device that simulates the appearance and sound of the radiofrequency generator. This was a double-blind study meaning that neither the patient nor the medical team in charge of the bronchoscopy and the care of the patient knew which treatment was being used.

The individuals were evaluated at 3, 6, and 12 months, and the primary study variable was changes in the questionnaire about asthma-related quality of life. Other variables examined were global quality of life, control over asthma, days without symptoms, morning PEF, rescue medication, FEV_1 and exacerbations.

The results of the study show that the group with thermoplasty had greater improvement in the asthma-realted quality of life

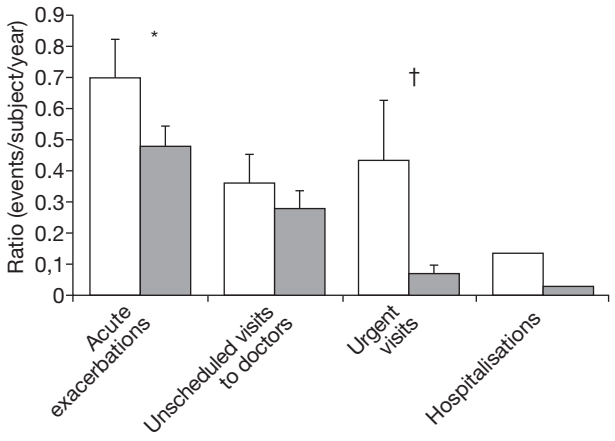

Figure 1. Use of healthcare resources after treatment. Severe exacerbations (requiring treatment with systemic glucocorticoids or double doses of inhaled glucocorticoids), unplanned GP visits, A/E visits, hospitalisations in the post-treatment period. White columns: placebo; grey columns: bronchial thermoplasty. Values are expressed in mean ± SEM. *Posterior probability of superiority = 95.5% †Posterior probability of superiority = 99.9%.

questionnaire compared to the sham bronchoscopy group (1.35 ± 1.1 versus 1.16 ± 1.23) (probability of superiority: 96% of intention to treat and 97.9% of protocol), although it is noteworthy that there was also a placebo effect. Furthermore, the thermoplasty group also presented greater improvement in global quality of life and showed a greater reduction in the rate of serious exacerbations (32%), emergency visits and days lost from work or school (fig. 1). The other secondary variables showed no significant differences between the two groups.

The thermoplasty group showed a greater number of adverse effects during the treatment period, consisting primarily in a worsening of symptoms or infections of the upper respiratory tract. The majority of these adverse effects were mild, transitory (during the first week) and were resolved with conventional medication.

This study is important since it is the first clinical trial published on thermoplasty that includes a control group that undergoes a "placebo" thermoplasty.

These data concur with previously published trials (with control group, but without a placebo), and together show that bronchial thermoplasty is a reasonably safe procedure in patients with moderate and severe asthma as shown by the improvement in clinical variables such as quality of life or the number of exacerbations, without a clear impact on other variables analysed such as lung function.

We can reflect on whether these results are sufficient to respond positively to the expectations generated by this treatment. In any case, according to the press release on the manufacturer's website (www.asthmatx.com) bronchial thermoplasty is currently being evaluated by the US Food and Drug Administration and has received positive feedback from the American Anesthesiology and Respiratory Therapy Devices Advisory Panel.

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Acute Mediastinitis as a Complication of H1N1 Influenza

Mediastinitis aguda como complicación de la gripe H1N1

To the Editor:

At the end of March and the beginning of April 2009 an infection caused by the H1N1 influenza virus broke out in Mexico.[1] On 11 June 2009 the WHO decided to raise its pandemic alert to the highest level, level 6, indicating the dissemination and transmission of the virus in at least 2 continents.[2] Most of the cases were mild, with a rate of hospitalization of 2-5% and a level of bacterial superinfection of 4%.[3] In the cases of secondary bacterial infection, amongst the most common pathogens we can single out: *Streptococcus pneumoniae*, *Staphylococcus aureus*, gram-negative bacilli and Group A streptococci.[3] Below we present the case of a young patient who, as a complication of an H1N1 influenza infection, developed a *Streptococcus pyogenes* superinfection and mediastinitis.

A 35-year-old male patient with no medical history or toxic habits that were relevant to his pathology came to A&E, having suffered, during the previous week, general malaise, asthenia, myalgias and fever, which had been associated with retrocardiac pain and dyspnoea for a number of hours. When the patient was examined, he was found to be suffering from hypotension (80/58 mmHg), tachycardia (112 bpm) and tachypnea without respiratory effort, and, analytically, the major findings were acute renal failure (creatinine 2.9 mg/dl) and coagulopathy (INR 1.4; aPTT 40 s). The patient was admitted to the intensive care unit with a diagnosis of septic shock, so treatment with a broad-spectrum empiric antibiotic was initiated. An echocardiogram and cervicothoracic CAT were performed, and a sample of the pharyngeal-tonsillar exudate was taken. Echocardiogram: no significant abnormalities were detected. Cervicothoracic CAT (fig.1a and b): enlargement of both tonsils, multiple pathologically enlarged laterocervical adenopathies, diffuse increase in mediastinal density, this being more marked in the anterior mediastinum, which was suggestive of mediastinitis. Bilateral pleural discharge, small pseudonodular images in the upper left lobe, suggesting alveolar infiltrates. Pharyngeal-tonsillar exudate: PCR positive for H1N1 influenza virus.

In view of the above findings, a decision was made to perform an urgent posterolateral thoracotomy in order to debride and clean the mediastinum. A culture of the pleural and mediastinal liquid proved positive for *Streptococus pyogenes* so the antibiotic treatment was adjusted. During his stay in the intensive care unit, the patient was haemodynamically stable and showed a decline in his sepsis marker levels, so he was transferred to the ward 18 days later.

Mediastinitis is a pathology with a mortality of about 40%,[4] in which the highest success rates are associated with early diagnosis, immediate antibiotic treatment and urgent surgery with mediastinal debridement and drainage.[5] In patients who have not previously undergone surgery the most common cause of mediastinitis is acute necrotizing mediastinitis (also known as descending necrotizing mediastinitis).[4] This is the first case presented in the literature of mediastinitis caused by *S. pyogenes* as a complication of H1N1